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March 2013 update
Number of relays

The Tor Project - https://metrics.torproject.org/
Total relay bandwidth

- Advertised bandwidth
- Bandwidth history

The Tor Project - https://metrics.torproject.org/
Directly connecting users from all countries

The Tor Project - https://metrics.torproject.org/
Directly connecting users from the Syrian Arab Republic

The Tor Project - https://metrics.torproject.org/
Directly connecting users from Vietnam

The Tor Project - https://metrics.torproject.org/
Directly connecting users from Taiwan

The Tor Project - https://metrics.torproject.org/
Directly connecting users from the Republic of Moldova

The Tor Project - https://metrics.torproject.org/
Tor 0.2.4.7-alpha .. 0.2.4.9-alpha

- New stronger/faster ECC-based link encryption
- New stronger/faster ECC-based circuit handshake (ntor, curve25519)
- Support for exiting to IPv6 destinations
- “Directory guards” to reduce user enumeration risks
Tor 0.2.4.10-alpha .. 0.2.4.11-alpha

- Better Sybil-resistance
- Harder for relays to lie about their bandwidth
- Change circuit create queue from size-based to time-based
- Resolve a DPI fingerprint for Tor's SSL transport
In upcoming Tor 0.2.5.x-alpha

- Clients can reach dir auths via IPv6
- Clients can specify their own cipher lists
- Bridge relays can load their own SSL link certificate
  - (more useful for debugging than I'd realized!)
- Fixed more issues in TestingTorNetwork
Outreach

- Access Innovation Awards
- 29c3 talk
- DEA meeting
- Dutch / Belgian law enforcement
- Jake's Burma trip
- OONI meeting in Amsterdam
Combined flash proxy + pyobfsproxy browser bundles

Posted January 14th, 2013 by dcf

Please help us test new experimental bundles that have flash proxy and pyobfsproxy enabled by default.

- Windows (sig)
- Mac OS X (sig)
- GNU/Linux 32-bit (sig)
- GNU/Linux 64-bit (sig)

Flash proxy is a transport that uses proxies running in web browsers as access points into Tor. pyobfsproxy is a Python implementation of the obfsproxy modular transport that makes network traffic look unlike normal Tor traffic. Both of these technologies make it harder to block access to Tor. If you previously used the obfsproxy bundle, please upgrade to this bundle, which in addition to flash proxy has new obfsproxy bridges.
Pluggable Transport work

- obfs3 implementation
- "pyobfsproxy"
- Format-transforming encryption
- "Scramblesuit"
- Flashproxy (second developer; standalone flashproxy; move to opt-in?)
Number of Flash Proxies
Number of flashproxy clients
Georgetown / NRL collaborations

• Aaron and Sathya's path selection simulator / entropy work
• Rob's throttling evaluation paper
• Proposal 218 (instrumenting relays)
• Shadow now supports multi-threading
Misc other progress

- Upcoming release of new “Stem” python Tor controller library
- Roadmap document for a Tor censorship debugger
- NDSS “rbridge” paper (bridge distribution strategy)
- Waterloo path splitting paper
Start on VoIP questions

- VoIP:
  - Push-to-talk VoIP-alike over TCP
  - Skype itself over TCP
What to expect next time

- uTP branch for simulator testing
- Compose pluggable transports (e.g. flashproxy + chopper + obfs3)
- Safely record and report obfsproxy stats
- Alternate scheduling / throttling / weighting / flow control
- Integrate 'optimistic data' feature into TBB